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## **Abstract**

The invention relates to a system for inspecting matt, surfaces and/or slightly curved in order associated with defects which are identify surface. modification of the course of the i.n matt, unlacquered particular for inspecting An illumination device is provided here bodywork. which irradiates the surface to be inspected at flat The illumination device consists angles. plurality of elongated luminous surfaces which arranged substantially parallel to one another, longitudinal direction of the luminous surfaces being aligned substantially parallel to the longitudinal direction of the surface to be inspected. Each point of the luminous surface contributes to the illumination. The angle between the normal line of an inspected surface element on the surface and the connecting line between the inspected surface element and any point on the elongated luminous surfaces is greater than approximately 70°. The light distribution luminous surface is tightly each elongated concentrated in planes which lie transversely with respect to the longitudinal direction of the respective surface, with an aperture angle which is preferably smaller than 15°, better 5°, preferably smaller than 2°, in such a way that a substantially sheet-type light distribution is achieved, which covers the surface element to be inspected on the surface. The observer is located within or at least in the vicinity of the angle predetermined by reflection of the sheet-type light distribution of the least one elongated at surface portion luminous surface on the to inspected.

(Pig. 1)